

*United States Army*  
***Logistics Integration Agency***



**Automatic Identification Technology**  
**Radio Frequency Technology**  
**Overview**

**Overview Briefing**

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# What is Automatic Identification Technology?

A Suite of Tools for Facilitating Data Capture, Aggregation, Transfer, and Transmission. Its Includes a Variety of Read/write Data Storage Technologies That Are Used to Process Asset Identification Information

Enablers of Army Total Asset Visibility

Bar Codes ( Linear and 2 Dimensional )

- Voice Recognition
- Integrated Circuit Cards
- Memory Buttons/Cards
- Magnetic Strips
- Optical Character Reader
- Machine Vision

• Data Bases & Communications

Logistics AIS

**Depots**

**Industry**

**Maintenance Process**



**Linear/2D Bar Codes**  
Single Items/  
Multi Packs  
Unit Equipment



**Optical Memory Cards**  
Pallets/Containers/  
Multi-Packs  
Fast Track  
Manifesting



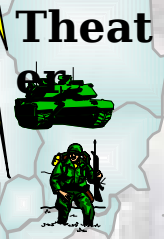
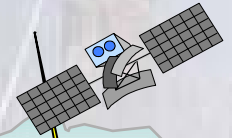
**Radio Frequency ID**  
Pallets/Containers/  
Unit Equipment  
"Nodal Asset Tracking"



**SMART Cards**  
Tactical Personal Information  
Carrier Readiness Data



**DTRACS/MTS**  
Satellite Tracking  
Truck/Rail/Barge/  
Bus  
"Movement Tracking"



**Theater**



# Why AIT...

## ■ Benefits

- **Allows Visibility of Resources Anywhere in the Intransit Pipeline**
- **Enables Source Data Automation to Be a Reality**
- **Increases Data Accuracy, Validity, and Synchronization**
- **Provides “In the Box” Visibility**
- **Makes Opportunities for Real Business Process Improvements**
- **Permits the Creation of Auditable, Paperless, and Seamless Information Systems**
- **Reduces Paperwork**

## ■ Supporting Doctrine/Policy

- **Joint Vision 2010/2020**
- **DoD Implementation Plan for AIT**



# Sensitive Item Marking

## Background

- **Army & Navy SEALS PoP Initiative - Naval Supply Systems Command and LIA Provided Funding**
- **Joint Kick-off Meeting 3 Oct 00**
  - **Tighter Security to Safeguard Weapons and Sensitive Assets**
  - **Approximately 3,500 Items Will Be Marked With MacSema Micro-Contact Memory Buttons; Symbol Technologies 2740 Read-Write Interface Devices Will Be Used**
  - **Smart Card Will Be Used for Access to Individual Arms Rooms, Not for Item Issue**
  - **RF-based System for Real-time Functionality**
- **Proof-of-Principle to Be Completed in FY 01, Will Provide Baseline From Which to Craft Army Solution for Digitizing Arms Room**
- **Navy AIT Support Facility Doing (St Inigoes, MD) Is Leading Development**



# AIT Sensitive Item Marking

## Objectives

- **Improve the Inventory Control & Management of Small Arms and Other Sensitive Items**
- **Ensure Full Accountability and Inventory Accuracy of Sensitive Items**
- **Eliminate Paperwork and Supporting Total Asset Visibility of Sensitive Items**
- **Improve DoD Critical Asset Security by Using Advanced Smart Card Technology**



# Sensitive Item Marking

## Arms Room Concept

### Effect Paperless Arms Room Operations . . .

- **Use Automatic Identification Technologies to Mark Weapons**
  - **Ensures Serial Number Accuracy (Contact Memory Button Placed on Accountable Portion of the Weapon)**
  - **Automates Inventories - Eliminates "Stubby Pencil" Methods**
  
- **Use "Smart Card" (Eventually the Common Access Card) to Issue Weapons From Arms Rooms**
  - **Limit and Record Time/date Access to Arms Room (Current PoP)**
  - **Authorized Weapons Written to Soldier's Card or DBA.**
  - **Date-Time-Weapon Issued Written to Card or DBA**
  - **Weapons Turn-in Removes Issue Data From Card or DBA**
  - **Issues/Turns-in History Resident on Arms Room Database**

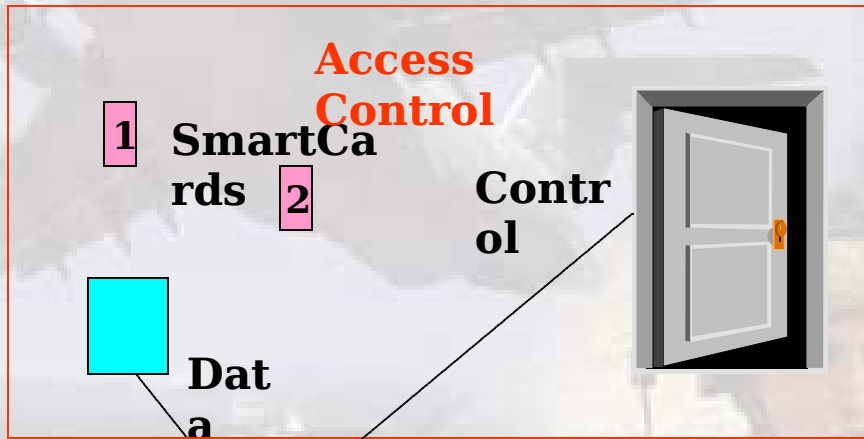


# AIT Technology Initiatives Application

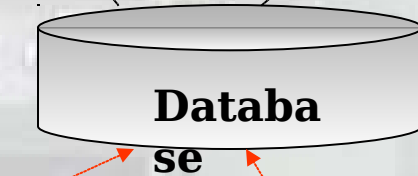
## Overview

**Weapons by Service  
(as of 18 Aug)**

Army	2.95
Navy/USMC/CG	8621
Air Force	471



IEEE 802.11



MicroButton Maintenance

Inventory Maintenance



Microbutton on Link

Issue

Receipt

Inventory

MicroButton Maintenance



# Summary

- **AIT Is Proven Technology**
- **Sensitive Item Marking Can Improve Current Processes**
- **Joint Concept Testing Will Begin 4Q 01**
- **DoD Is Pursuing AIT To Meet Future Requirements**





# Proposed CAC Application Data

## Joint Weapons Issuance

Element	Description	Domain	Format
	<b>(DoN SCO)</b>		
Stock Number	A 13-digit stock number consisting of 4-digit Federal Supply Classification code (FSCM) and the 9-digit National Item Identification Number (NIIN). The NIIN consists of a 2-digit National Codification Bureau number designating the central cataloging office	displayed as: <i>nnnn-nn-nnn-nnnn</i> (omit hyphens when submitting to card)	
Serial Number	Serial Number of weapon issued	free text	
Weapon Status	Status of the weapon	Assigned, Approved, Issued, Recovered	X
Status Changed Date	Date the status was most recently updated	any valid date	<i>ccyy/mm/dd</i>
Pre Fire Inspection Date	Most recent date a pre-fire inspection was completed for weapon issued	any valid date	<i>ccyy/mm/dd</i>

**332 Byte Total  
Application**

**Cage Code?  
Nomenclature (optional)**

**Part Number or NIIN?  
Weapon Issue?**

**Multiple**